The Structure of Financial Regulation

Edited by
David G. Mayes and Geoffrey E. Wood

Routledge International Studies in Money and Banking

The Structure of Financial Regulation

How should financial integration be organised in a globalising world? With the rash of financial crises in recent decades there has been a rush to introduce ever more comprehensive and complex regulation.

The Structure of Financial Regulation examines the motivation behind the regulation, who should organise it, whether it should vary according to the sector of activity or the regulatory culture of the country. Individual contributors examine the main regions of the world, with particular emphasis given to Europe and the United States. The book also examines areas where there have been clear failures, such as the scandals in the United States in recent years and the failure to address cross border issues. Attention is also given to the regulation of the core but often overlooked area of the 'plumbing' of the financial system – payments, settlement, securities depositories and custody.

Under the authoritative editorship of Geoffrey Wood and David Mayes, this authoritative volume will be a useful addition to any serious economist's bookshelves.

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To
Matti Vanhala
Governor of the Bank of Finland
who sadly did not see this work completed

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Preface

This book is the product of one of the Bank of Finland's two research programmes, that on the future of financial markets. The other programme is on modelling monetary policy. The Bank is concerned under the terms of its charter to ensure that, in the process of development of financial markets, Finnish firms, households and, indeed, the government have access to a financial system that is efficient and effective by international standards and gives access to the full range of financial instruments at competitive prices. It would be easy in a small country on the geographical periphery of Europe to find that innovation, the main markets and the best prices were all somewhere else and hence the economy put at a disadvantage. The Bank's research is therefore focused not merely on trying to assess where the trends in market development are going but in understanding the factors which shape them so that pressures and problems can be anticipated.

Perhaps unusually among central banks, the Bank of Finland has pursued a rather active role in ensuring the efficiency and early adoption and development of financial instruments. This includes involvement in the development of smart cards, venture capital and most recently tools for improving the efficiency of payment systems (see H. Leinonen and K. Soramäki, 'Simulating Interbank Payment and Securities Settlement Mechanisms with the BoF – PSS2 Simulator', Bank of Finland Discussion Paper 23/2003). This pre-emptive approach applies to the question of the structure of financial regulation. Finland had an unpleasant banking crisis at the beginning of the 1990s, when incidentally banking supervision was not a responsibility of the Bank, and is keen to ensure that similar mistakes are not made again. One of the clear messages from that period is that the regulatory framework has to anticipate new risks and not merely add to them. Then, much of the risk came from financial liberalisation. On the whole, specific new risks, whose realisations cause problems, are by definition almost impossible to detect but those which stem from changes in the structure of regulation are. And in this specific case we can identify them clearly from the creation of the single market in financial services in the European Economic Area. The whole point is to break down protective barriers, increase competition and contribute to a more dynamic economy. In other words it is intended to change behaviour. While Basel 2 helps provide an increasing focus on risk management within the financial system, it is not yet clear whether that will increase the volatility of the financial system along with our ability to cope with it or decrease the volatility in the first place.

We therefore organised a conference in September 2004 to complement our own research in this area. By drawing on information from a range of countries and analyses from a variety of perspectives we hoped to throw light on the state of existing knowledge on structures for financial regulation, supervision and systemic stability. We hoped then to use that base to discuss whether there were optimal structures for handling these topics and how they could be achieved. Our own perspective is that we exceeded expectations and attracted a fascinating set of papers and comments.

The conference and this book cover three main facets of the topic. The chapters by Charles Goodhart (Chapter 2) and Forrest Capie (Chapter 3) are primarily historical in character and explain not just what the systems are in the main countries but how these systems arose. There has been a complex interaction between the institutional structures and the environments in which they operate. Thus the success of the 'free banking' period in Scotland reflected not just the inherent prudence of the Calvinist tradition but the very real exposure under unlimited liability.

Anna Schwartz, in the chapter which was given as a luncheon speech at the conference, considers the lapses from regulatory standards and regulatory expectations that have occurred in recent years, sometimes in the US and sometimes elsewhere. From these she draws some implications and questions, most important the old but, as her speech emphasised, the still unsatisfactorily answered question – 'Who will regulate the regulators?'.

As the subsequent chapter, by Justin O'Brien, colourfully illustrates, the modern world lacks the neat cultural and institutional balance which served so well in Scotland's 'free banking' period. He accordingly argues that major changes to corporate governance are needed to overcome the recent scandals. The next four chapters cover the issue of the design and operation of regulatory structures that seek to handle cross-border activities. While this is primarily a European concern, Robert Bliss reveals many of the difficulties experienced in the US system. Although the US system has had around 150 years to adapt to a single market rather than the 15 or so in Europe, it still has a complex network of regulators and supervisors. While there are elements of hierarchy and a clear responsibility at the federal level for handling problems through the FDIC it is much less than ideal, as its success might suggest. If Europe is looking for a model to copy the US is not it. However, as the chapter by Dirk Schoenmaker and Sander Oosterloo reveals, Europe has considerable problems of its own. There is no clear match between supervisory responsibility and the access to resources to maintain systemic stability. This is a recipe for a serious problem. Robert Eisenbeis addresses this by setting out the agency problems and goal conflicts in Europe and suggesting routes through which they might be addressed. Kahn and Santos take the issue rather wider and discuss how countries organise all of the parts of banking system regulation. They explore in some detail how responsibilities overlap and may conflict and explain why many of the models that assume a neat compartmentalisation may be misleading and not reflect the inherent complexity and potential conflicts of interest.

The final section of the book, moves on to the problems of regulating and encouraging the development of the key parts of the financial system itself: payments, clearing and securities settlement. Kari Kemppainen sets the scene by explaining why it seems to be so difficult to develop a European level payment system. Although it may sound a caricature, much of the discussion about banks is concerned with how excessive enthusiasm and risk taking can be dampened, while in the case of payments and, to a lesser extent securities settlement, the problem is to encourage development. This is a classic network industry difficulty. Harry Leinonen goes on to offer technical solutions and ways forward that should improve efficiency while maintaining the pressure of competition. Alistair Milne extends this discussion of the need to rationalise while maintaining competitive pressure to securities clearing and settlement. The difficulties are highlighted in the final chapter by Karlo Kauko that shows how a duopoly can readily lead to a suboptimal outcome from the investors' perspective.

A more detailed guide to the structure and content of the book which resulted from this conference is to be found in the Introduction (ch. 1). We are grateful to Janet Mayes for her help with the editorial work.

1 Introduction

With the advent of Basel 2 the supervision and regulation of banks has probably reached a high water mark. Yet such detailed supervision is a new phenomenon in many countries. Even 30 years ago the controls would have been at arms length. The reform of the system has, to a large extent, been the response to unfortunate experience. While full-blown financial crises have fortunately struck only a few of the main countries all have experienced strains from time to time.

However, there are strong differences in traditions. The United States, for example, has a long history of banking regulation. Many continental European countries also have quite long-standing traditions of regulation and official supervision of financial institutions.

New Zealand is one of few countries that has reacted differently and argued that the solution to improving the prudential behaviour of banks lies not in regulating and supervising them evermore closely but making sure that the stakeholders in banks are aware of and are exposed to the risks they are running. Moreover the stakeholders, both actual and potential, need to be able to act on the information they receive and hence manage their risk exposure as they think fit. It is for the directors and managers of banks to run banks not the supervisors. Their task is to ensure compliance and to ensure that the system is designed in such a way that the sort of shocks that assail the system do not result in generalised problems that harm the economy as a whole and those who have not knowingly taken on risks in particular banks.

Much of the problem relates to bank exit. People not only think that banks are safe but the managers of banks may come to believe that they will be saved if the bank gets into trouble. Indeed the trend has been to try to make banks so large that it is inconceivable that they could be allowed to fail. In smaller economies this results in substantial monopoly. It is highly debatable whether the economies of scale match the losses from limited competition.

The organisation of regulatory and supervisory responsibility within most countries is largely the result of history rather than of optimal design but in recent years several countries have changed the arrangements.

There is no single pattern (Table 1.1). Some such as the UK, Australia and Estonia have separated supervision from the central bank and in the UK, in particular, collected a diverse group of supervisors of different parts of the financial sector under a single grouping. Some like Ireland and the Netherlands have done the exact opposite and collected all the supervisory arrangements under the aegis of the central bank. Others like Finland have set up a financial supervisory agency that is legally separate but closely integrated with the central bank, however, a part of the system (insurance) remains separate because of the compulsory state determined pension system that is administered in the private sector.

What has emerged very clearly in this bout of reorganisation is the recognition of distinct features of the task. Three can readily be identified: prudential regulation and supervision; conduct of business regulation; responsibility for the integrity of the financial system as a whole. In the case of banking and insurance it is possible to treat regulation and supervision of individual entities as a largely separate exercise from concern for the system as a whole. Indeed, there can be conflicts of interest between the two. This can, therefore, enable a helpful division of focus between a central bank charged with ensuring a stable system and a supervisory authority charged with ensuring prudentially managed institutions within it. With some exceptions reality is not that neat. Deposit insurance, for example, can sit uneasily in the middle, being the agent of neither the supervisors nor of the central bank – nor, indeed, of the banks themselves. The incentives for the different organisations may not match, with a central bank being keen to see problems tackled early to avoid threats to the system and supervisors or insurers keen to give problems time to resolve themselves in the hope of avoiding failure or demands on funds. The neatness does not even apply in Finland, as it is the Financial Supervisory Authority that is charged with maintaining the stability of the financial system not the Bank of Finland. Nevertheless, it is the Bank that produces the annual overview of Financial Stability.[1] When it comes to financial markets neat divisions are more difficult as the system and the individual institutions are often effectively the same in smaller countries.

Despite this development in regulation it is clear that the system has not kept pace with the internationalisation of financial markets. This is somewhat ironic in a European context as the driving force behind financial regulation has been the aim of creating a single internal market in financial services. The dichotomy occurs because supervisory powers and regulatory powers are only national in scope. Hence when bank operations run across borders they necessarily run across jurisdictions as well – even if regulations are harmonised to a substantial degree.

Table 1.1 Institutional organisation of central banks and supervisory authorities 2000

Country	*Monetary policy*	*Supervision*				*Comments*
		Banking	*Payments system*	*Insurance*	*Securities*	
Argentina	Banco Central de la República Argentina	Superintendencia de Entidades Financieras y Cambiarias	Banco Central de la República Argentina	Superintendencia de Seguros de la Nación	Comisión Nacional de Valores	Independent CB (currency board) The Superintendencia is subordinated directly to the CB governor (Art. 43 of law 24.144, dated 23.09.1992).
Australia	Reserve Bank of Australia	Australian Prudential Regulation Authority (APRA)	Reserve Bank of Australia	Australian Prudential Regulation Authority (APRA)	APRA and Australian Securities and Investment Commission (ASIC)	Independent CB since 1959 1998 – withdrawal of banking supervision from RBA and merger with insurance and Superannuation Commission
Austria	National Bank of Austria	Ministry of Finance				Independent CB (European CB)
Belgium	National Bank of Belgium	Banking and Finance Commission	National Bank of Belgium		Banking and Finance Commission	Independent CB (European CB)
Bolivia	Banco Central de Bolivia	Superintendencia de Bancos y Entidades Financieras	Regulation by the BCB	Separate	Shared	Independent CB since 1995 1987 – creation of the Superintendência de Bancos y Entidades Financieras

continued

Table 1.1 Continued

Country	*Monetary policy*	*Supervision*				*Comments*
		Banking	*Payments system*	*Insurance*	*Securities*	
Canada	Bank of Canada	Office of the Superintendent of Financial Institutions	Bank of Canada	Office of the Superintendent of Financial Institutions	Office of the Superintendent of Financial Institutions	Independent CB 1925 – Creation of the Office of the Inspector General of Banks (OIGB) 1987 – merger of the OIGB with the Department of Insurance
Chile	Banco Central de Chile	Superintendencia de Bancos y Instituciones Financieras	Banco Central de Chile	Superintendencia de Valores y Seguros	Superintendencia de Valores y Seguros	Independent CB since 1989 1925 – Creation of the Superintendência
Colombia	Banco de La Republica de Colombia	Superintendencia Bancaria de Colombia (MF)	Banco de La Republica de Colombia	Superintendencia Bancaria de Colombia	Superintendencia Bancaria de Colombia	BRC is an independent CB since 1991, though the Minister of Finance is the governor of the Junta Monetaria (seven members of which 6 are from the BRC)
Costa Rica	Banco Central de Costa Rica	Superintendencia General de Entidades Financieras		Separate	Superintendencia General de Valores	The CB is not independent The Superintendencia General de Entidades Financieras is a subsidiary of the CB

Denmark	Danmark Nationalbank	Danish Financial Supervisory Authority	Danmarks Nationalbank	Danish Financial Supervisory Authority	Danish Financial Supervisory Authority	Independent CB 1988 – creation of DFSA through merger of the Supervisory Authority for Banks and Saving Banks and the Insurance Supervisory Authority 1980 – merger with the Supervisory Authority for Mortgage Credit Institutions
Ecuador	Banco Central del Ecuador	Superintendencia de Bancos	Banco Central del Ecuador	Superintendencia de Bancos	Superintendencia de Compañias del Ecuador	The CB is not independent 1927 – creation of the Superintendencia following separation from the CB
El Salvador	Banco Central de Reserve de El Salvador	Superintendencia del Sistema Financiero		Superintendencia del Sistema Financiero	Superintendencia de Valores	The CB is not independent
England	Bank of England	Financial Services Authority	Bank of England	Financial Services Authority	Financial Services Authority	Independent CB since 1997 1997 – withdrawal of bank supervision from Bank of England and merger of supervisory agencies
Finland	Bank of Finland	Financial Supervision Authority	Bank of Finland		Financial Supervision Authority	Independent CB (European CB) 1922 – creation of the Bank Inspectorate 1993 – creation of FSA through merger of the bank and securities supervision functions

continued

Table 1.1 Continued

Country	*Monetary policy*	*Supervision*				*Comments*
		Banking	*Payments system*	*Insurance*	*Securities*	
France	Banque de France	Banking and Financial Regulatory Committee/Credit Institutions and Investment Firms Committee/ Banking Commission	Banque de France		Banking and Financial Regulatory Committee/ Capital Markets Council/Stock Exchange Commission	Independent CB (European CB) 1996 – Independence of the Banque de France
Germany	Deutsche Bundesbank	Federal Banking Supervisory Office			Federal Securities Supervisory Office/ Federal Supervisory Office for Securities Trading	Independent CB since its creation in 1957. (European CB)
Greece	Bank of Greece	Bank of Greece	Bank of Greece			Independent CB (European CB)
Guatemala	Banco de Guatemala	Superintendencia de Bancos		Superintendencia de Bancos	Shared	The CB is not independent Banco de Guatemala and Superintendencia de Bancos are subordinated to a Junta Monetaria
Holland	De Nederlandsche Bank	De Nederlandsche Bank	De Nederlandsche Bank		De Nederlandsche Bank	Independent CB (European CB)

Honduras	Banca Central de Honduras	Bank Supervisor		Bank Supervisor	Bank Supervisor	See Aguirre (1997)
Hong Kong	Hong Kong Monetary Authority	Hong Kong Monetary Authority	Hong Kong Monetary Authority		Hong Kong Securities and Futures Commission	CB Independent (currency board) 1993 – merger of the bank supervision with central bank
Ireland	Central Bank of Ireland	Central Bank of Ireland	Central Bank of Ireland			Independent CB (European CB)
Israel	Bank of Israel	Bank of Israel	Bank of Israel			Independent CB
Italy	Banca d'Italia	Banca d'Italia	Banca d'Italia			Independent CB (European CB)
Japan	Bank of Japan	Financial Supervisory Agency	Bank of Japan	Financial Supervisory Agency	Financial Supervisory Agency	The CB is not independent
Korea	Bank of Korea	Financial Supervisory Commission	Bank of Korea	Financial Supervisory Commission	Financial Supervisory Commission	Independent CB 1998 – withdrawal of bank supervision from Bank of Korea and merger of the supervisory agencies (Securities and Exchange Commission and Insurance Supervisory Commission)
Luxembourg	Luxembourg Monetary Institute	Luxembourg Monetary Institute	Luxembourg Monetary Institute			Independent CB (European CB)

continued

Table 1.1 Continued

Country	*Monetary policy*	*Supervision*				*Comments*
		Banking	*Payments system*	*Insurance*	*Securities*	
Mexico	Banco de México	Comisión Nacional Bancaria y de Valores	Banco de México/Comisión Nacional Bancaria y de Valores	Comisión Nacional de Seguros y Fianzas	Comisión Nacional Bancaria y de Valores	Independent CB since 1993 (constitutional reform) 1995 – creation of CNBV, through merger of banking and securities supervision
Nicaragua	Banco Central de Nicaragua	Bank Supervisor		Bank Supervisor	Bank Supervisor	See Aguirre (1997)
New Zealand	Reserve Bank of New Zealand	Reserve Bank of New Zealand	Reserve Bank of New Zealand		Reserve Bank of New Zealand	Independent CB since 1989
Norway	Norges Bank	Banking, Insurance and Securities Commission	Norges Bank	Banking, Insurance and Securities Commission	Banking, Insurance and Securities Commission	Independent CB 1986 – creation of the Banking, Insurance and Securities Commission
Panama	Central Bank	Bank Supervisor		Separate	Separate	See Aguirre (1997)
Paraguay	Central Bank	Central Bank		Separate	Separate	See Aguirre (1997)
Peru	Banco Central de Reserva del Perú	Superintendencia de Banco y Seguros	Banco Central de Reserva del Perú	Superintendencia de Banco y Seguros	Comisión Nacional Supervisora de Empresas y Valores (CONASEV)	The CB is not independent 1931 – creation of the Superintendencia 1979 – administrative and functional independence of the Superintendencia

Portugal	Banco de Portugal	Banco de Portugal	Banco de Portugal			Independent CB (European CB)
Spain	Banco de España	Banco de España	Banco de España	la Dirección General de Seguros	la Comisión Nacional del Mercado de Valores	Independent CB (European CB) 1994 – independence of Banco de España
Sweden	Sveriges Riksbank	Swedish Financial Supervisory Authority	Sveriges Riksbank	Swedish Financial Supervisory Authority	Swedish Financial Supervisory Authority	Independent CB 1991 – merger of the Bank Inspection Board and of the Supervisors of Bank Securities and Insurance Companies
Switzerland	Swiss National Bank	Federal Banking Commission	Swiss National Bank			Independent GB
Uruguay	Central Bank	Central Bank	Central Bank			See Aguirre (1997)
Venezuela	Banco Central de Venezuela	Superintendencia de Banca y Otras Inst. Financieras		Separate	Separate	1993 – creation of the Superintendencia

Source: Lundberg (2000).

Note
CB, Central Bank. All labelling is as in the original, so 'England' applies to GB and Northern Ireland, 'Holland' to Netherlands, for example, some small corrections have been applied.

The extent of financial supervision and regulation

It is easy to adopt the mindset of recent years and assume that extensive regulation of banks is necessary in order to have a prudent and stable system. However, as Charles Goodhart and Forrest Capie point out in Chapters 2 and 3, respectively, extensive regulation is a product only of the last 150 years or so and then only in some countries. In countries such as the UK, Sweden and France, which have the oldest central banks, these banks emerged as a part of the banking system that primarily acted for the government. Because of this role they became more powerful than the other banks and started to play a central role in the banking system, particularly in the settlement of obligations among banks. In particular, such central institutions came to be looked on as suppliers of liquidity – the lender of last resort, in the terms of Bagehot, lending against security at a rate above that prevailing in the market, so they were indeed only the last resort after more favourable borrowing opportunities had been exhausted. The lender of last resort does not have to be the central bank, and in Germany this function is performed by the Liquidity Consortium Bank, but that bank is owned by the central bank and the banking industry and has resort to the central bank in the event of difficulty.[2]

In this sort of framework, the financial system is more of a self-regulating club, where the structure protects it against the unexpected. The structure normally has two elements: constraints on behaviour to limit the risk of problems and a set of procedures to come into play to control the impact if problems are nevertheless realised. The same structure applies to highly regulated systems where there is corporate law, extensive regulation of what banks may and may not do and supervision (monitoring) to check that they comply in the first element and lender of last resort, deposit insurance, implicit guarantees and bankruptcy law in the second. The greater the insurance liability of the other members of the club, whether or not that includes the taxpayer, the more they will want to be convinced of the risk management methods of the other members.

In the period before limited liability, creditors would be paid out in the event of failure up to the point that the last shareholder had been bankrupted. In the case of the City of Glasgow Bank in 1878, for example, it proved to be necessary to bankrupt all but 254 of the 1,819 shareholders to make a full payout. (It is worth noting in our context that some of the residual (solvent) shareholders formed a new company that acquired the assets of the bank, which could be sold off at a favourable juncture, thereby assisting the receivers in the completion of their task.) Given that joint stock banks normally had quite a large number of wealthy individuals as their shareholders this could effectively mean that depositors and creditors were fairly secure even in the absence of any explicit insurance. No bank with more than nine partners failed to pay out in full on failure and total losses to creditors over the entire period of so called free banking in

Scotland, 1716 to 1845, were trivial (White, 1984). Indeed, the shareholders would have every incentive to recapitalise a bank in difficulty rather than let it close because of the crippling nature of their exposure under default. A bank tends to be worth more as a going concern even if its liabilities exceed its assets and recapitalisation saves having to pay the receiver's costs, which can be substantial. In the same way this would encourage prudence. The banks which expected to pick up market share from those who were weaker or failing would need to be strong enough to do so, as some element of new capital would be needed. Not surprisingly the prevailing Scottish banking arrangements were viewed very favourably by Adam Smith (1776) in *The Wealth of Nations*, who argued not simply that the competition involved encouraged prudence ('circumspect in their conduct' (p. 268) to use his more ringing tones) but also innovation.

However, to some extent the way a market operates is the product of its time. For example, in the period of 'free banking' in Scotland, the system could be satisfactorily self-regulating because of the shared Presbyterian codes of conduct among directors and shareholders.[3] Such unwritten codes govern the fair treatment of customers, levels of charges and hence profits as well as the honesty of interbank dealings. Such systems stop working when some of the members no longer share the common ethos, as Goodhart and Bliss point out with respect to the London system as difficulties started to emerge in the 1970s.[4] This idea of mutual obligation seems to extend to the German system (Beck, 2003) even today and was one of the facets of the successful operation of the building society sector in the UK until banks started to enter the private mortgage market on a significant scale. Although the (monthly) fixing of interest rates could be viewed as highly uncompetitive, it was highly predictable (Mayes, 1979). Margins were low, as were the rewards of the managers and directors and the concept of mutuality developed a framework of prudence as long as the industry remained in its traditional business. Strong cash ratios were required. The small number of failures were dealt with by takeover by larger societies as the failures were almost entirely of small societies, hit either by the actions of a single individual or a heavy asymmetric shock that impaired either collateral or regional income (as most societies were regionally concentrated).

If we look to the United States, the position is different. Bank failure has been a more common occurrence, and the interaction between the structure of regulation there and failure has been quite complex. Regulation has responded to weaknesses in a series of steps. Initially banks could only be set up by specific legislation but this was replaced by a period of 'free banking' between 1838 and the passing of the National Bank Act in 1863. The prohibition on interstate banking and in some states, branch banking, was a response to try to ensure that banks were properly licensed, properly managed and that all their operations could be under the control of a single locally knowledgeable authority. However, it has also meant that there could be a greater concentration of risks. Similarly, the prohibition of 'universal banking' under the Glass–Steagall Act of 1932 also affected the risk characteristics of banks. However, the 1933 Banking Act provided the more major response to the wave of failures after the 1929 crash and led to the creation of the FDIC (Federal Deposit Insurance Corporation). The move towards having bank holding companies as a means of having banks in more than one state has looked a benefit in that with concentrated ownership it would be easier to get support for a bank in difficulty from the resources of a much larger group. Indeed this 'source of strength' doctrine has been promoted by the Federal Reserve. Unfortunately, as pointed out by Robert Bliss and by Kern Alexander, this source of strength applies in the initial acquisition and merger discussion and cannot be relied upon in the case of difficulty, i.e. just when it is needed. In turn FDICIA (Federal Deposit Insurance Corporation Improvement Act 1991) has been part of a reaction to the failures and difficulties in the savings and loan industry, which were themselves assisted by deregulation of the sector.

Even so it is easy to confuse the early onset of banking regulation with the involvement of the Federal Reserve, which only acquired the key role in that area when it acquired supervisory competence over bank holding companies under the Bank Holding Company Act of 1956.[5] (It had always been intended to act as lender of last resort – although it sometimes failed to do so – but had no supervisory competence until that date.)

By comparison, the UK (and related Commonwealth countries) stands out as rather an anomaly. Until the early 1970s it had experienced little in the way of banking problems and hence had not felt the need for extensive regulation. The need for regulation seemed to develop largely as a result of the opening up of competition after the introduction of Competition and Credit Control in 1971, and a number of bad experiences, including Johnson-Mathey in 1984, BCCI (Bank of Credit and Commerce International) in 1991 and Barings in 1995. No only was legislation tightened up but in 1997 the whole framework was changed with the creation of a single unified regulator in the FSA (Financial Services Authority) which amalgamated all nine different financial regulators in a single body, separate from the Bank of England.

It is difficult to know how far to go with regulation. Charles Calomiris points out that there is 'an optimal amount of financial crime'. No doubt a similar remark can be made about imprudence. If the system is to be organised such that financial crime is impossible, then it will not operate effectively and will be cumbersome and expensive. For people to have confidence in the system the levels of such crime needs to be sufficiently small and the forms of insurance and redress sufficiently cheap and effective. These will not be hard and fast lines but functions of the desires of society for protection at any particular time and of the degree of criminality that is perceived. Calomiris argues that, despite the notorious examples of recent years in the United States, the system has been operating very well in terms of providing a return to shareholders and fair treatment of customers in the face of strong competition. Hence it has been in need of relatively limited changes.

This stands in contrast to Justin O'Brien's hugely stimulating review of the various examples of unacceptable behaviour in US markets in recent years and the inability of the authorities to secure convictions in many instances. These examples were quite enough to stimulate a vigorous response, not just in terms of the prosecutions but in a rewriting of the accepted behaviour with the Sarbanes–Oxley Act. However, as Stefan Huemer points out in his comments, Europe has not been immune from these scandals, with the Parmalat and Ahold affairs being the most prominent. European regulation in turn has responded, remaining a notch more prescriptive than its US counterpart.[6] There are some ironies in the contrast between the two systems. In accounting standards, for example, despite its name, the Generally Accepted Accounting Principles (GAAP) in the US (generally accepted accounting principles) is in practice a highly rule-based scheme whereas the approach of the International Accounting Standards (IAS), which the EU is hoping to adopt, is more explicitly based on principles (Myddelton, 2004).

Calomiris stresses the importance of reputation in policing a system of self-regulation. If those who break the rules or act against the spirit of them are going to be heavily penalised through loss of jobs, drastic reduction in the profitability of the company and loss of market share, then most examples of rule-breaking will occur when the parties involved are desperate. The Nick Leeson case in Barings is a clear example – there seemed to be no other way of correcting the errors. Sanctions do not have to be imposed by outside authorities. In the case of the coup in euro bond markets perpetrated by Citibank in 2004, they did nothing which was against the rules but it was a clear case of manipulating a market in a way that people felt was inappropriate. As a result Citibank has had to take significant action to try to repair its reputation. Furthermore, others in the industry will not attempt to pull the same stunt, even if the authorities are not completely successful in making the market transparent enough to prevent it.

Retribution by the market can be far more drastic than the sorts of penalties the authorities might impose. Arthur Anderson's actions resulted in their demise as a firm; this occurred before their later acquittal of the charges which brought them down. Shareholders can push out directors for strategies and actions which they feel could cause them loss, as was revealed with first the resignation (in 2005) of the chief executive of Deutsche Börse and then the departure of the chairman. There does not have to be any proof or evaluation in a court. Whether or not the price offered for the London Stock Exchange was appropriate and what the net gains might be was an opinion, which cannot be tested before or after the event. Schwartz cites the case of Riggs Bank that came to an out of court settlement to pay the Office of the Comptroller of the Currency US$25mn (in May 2004) in the face of allegations of insufficient action to avoid money laundering. The Federal Reserve also ordered it to close its Miami subsidiary and to seek approval before it paid any dividends or bought back stock. However, the market impact was that Riggs was bought by PNC Financial Services Group in July and the business with embassies, which was the focus of the allegations, is being picked up by HSBC. Similarly the requirement by the Japanese regulators for Citygroup to close its four private banks in Japan resulted in publicity that was probably more damaging to its reputation than its revenues.

Calomiris argues for more opportunity for the market to act to provide incentives for prudent management.[7] In previous work (Calomiris, 1999) he has emphasised the importance of all banks having subordinated debt, a point repeated here by Benink in his comments on Chapter 6.[8] On this occasion Calomiris cites the issue of not needing to warn shareholders before trying to buy significant holdings in a company. The warning raises the price and hence removes some of the opportunity for such bids. Clearly there are issues involving the fair treatment of small and less informed shareholders but reducing competitive pressure beyond a certain point is unlikely to be in the interests of anyone except the incumbent management.

The problem is to determine the point at which the competition ceases to act as a spur to do better and starts to introduce such panic that prudence is sacrificed and 'excess' risk taking from the point of view of the stakeholders begins. The debate in the banking literature about where this occurs continues. Other features of the regulation of the market can alter its incidence. The greater the degree and rapidity of disclosure then the less the opportunity for inordinate risk taking as stakeholders will be able to respond.

Regulation and the behaviour of the regulated are very much a 'dialectic', as Anna Schwartz puts it in Chapter 4, a description also put forward by Kane (1977). Increasing regulation is a response to behaviour which society finds unacceptable. Avoidance of regulation then occurs where firms feel that their profit opportunities are being unduly inhibited. However, it is not simply a cycle of ever-increasing regulation. There have been periods when good behaviour has been rewarded with an easing, in the 1970s, for example. Schwartz regards this dialectic as being a process by which regulation can be improved but while one may be able to assess whether regulation has been able to achieve its desired objective in terms of limiting the behaviour causing concern to acceptable levels, this says nothing about its cost. Here the FSA in London has gone a long way towards trying make cost–benefit analyses of regulation. However, such studies are strongest on the direct costs to the regulator and the regulated of compliance. Analyses of the wider implications have found quantification much more difficult (NERA, 2004). As Masciandaro points out in his comments, a cost–benefit assessment of the structure of the system as a whole sounds desirable, but it is too complex a suggestion to be practical. Benston (1995) has a much more cynical view of the interaction between regulation and behaviour, arguing that regulation and financial instability are positively correlated rather than part of converging dialectic process.

The dialectic in regulation extends to the organisational structure of the system. The unified and independent Financial Services Authority in the UK is a product of the uneven quality of regulation among its nine predecessor bodies, and the criticism that the Bank of England received for its handling of banking problems and the failure of BCCI and Barings in particular.[9] In the US the creation of the Federal Reserve was a reaction to the problems encountered in the absence of a central bank to act as lender of last resort. The creation of Federal Deposit Insurance was the result of the Fed failing to act in that lender of last resort role. FDICIA and change in institutional balance it involved was a reaction to the savings and loan debacle and the exhaustion of the deposit insurance funds in the industry. Similarly the switch of responsibility for banking regulation and supervision from the Finnish ministry of finance to the Bank of Finland, reflected the horror of the banking crisis at the beginning of the 1990s.

However, a chequered history is not the only explanation. Size of country also matters. Unifying the whole system in the Central Bank and FSA of Ireland in 2003 made eminent sense. It is difficult to put together more than one sufficiently qualified team. Roles are separate and delineated. The Irish Financial Services Regulatory Agency is an autonomous body within the Bank, responsible for regulation and consumer protection in the sector. The set up in Finland is not particularly different. Although the Central Bank and the Financial Supervision Authority (Rahoitustarkastus) have a common administration, they are in separate buildings and have separate boards, that of the FSA being chaired by the Deputy Governor of the Bank. As a result although the tasks are clearly separate there can be a ready exchange of information and ideas (there is only one research department for the two organisations (located in the Bank). The relationship between the Banque de France and the Commission Bancaire in France is somewhat similar (with the Governor of the Banque de France being the Chairman of the Commission). However, there are also anomalies; whereas the Bank of England and the Central Bank of Ireland are charged with maintaining financial stability, this is only explicit for the Finnish FSA and the Bank of Finland's responsibility for the financial system is more generally defined.[10]

The United States offers a completely different paradigm in terms of structure and one which no one starting with a clean slate would think of creating. The US system is a complex network of overlapping regulators, stemming from the days when much of the regulatory responsibility was at the state, or even more local, level. These regulators have been supplemented by country-wide regulators, who are often specific to particular parts of the industry (as set out by Robert Bliss in Chapter 6). As a result financial firms have to deal with many regulators but regulators need to co-operate in order to get the task completed efficiently. (Robert Eisenbeis gives several examples in Chapter 8 of how the US can end up with agency conflict rather than co-operation.) However, as discussed in more detail in the next section, if one wants to put in place a non-overlapping system for a large area, it is difficult to avoid a very centralised system. Because of the size of organisation involved that would then face the opposite problem of size, namely bureaucratic inefficiency. The UK FSA is a large organisation and probably pushing the limits of efficiency. Creating a single agency for Europe would involve an organisation at least five times the size, if we multiply up by the number of significant institutions in the rest of the area, and one where national differences would make it very difficult to achieve synergies. Anything in the short run would necessarily be largely of the form of creating an additional tier at the top.

There are two separate concerns here. One is how far regulation of banks and other financial institutions should be concentrated under a single body in a given jurisdiction.[11] The other is whether that body should be the central bank, particularly in the case of the narrowly defined banking system.

Not surprisingly the authorities tend to find favour in the system that they already have – if there were strong dislikes or problems then it is likely that there would have been pressure for change. There is no obviously superior model of supervision, as Masciandaro puts it. Lundberg (2000) presents a summary of the issues for a country that is trying to weigh up the advantages of a change. The key issue is whether concentrating all activities in the Central Bank provides information that leads to better monetary policy (Peek *et al.*, 1999) or whether it leads to a conflict of interest and hence worse supervision and monetary policy as a result.

Monetary policy might be easier in the face of potential system financial problems and supervision might be more tolerant if it felt that monetary policy was likely to accommodate major problems. Similarly if the Central Bank were provider of various parts of the payment system it might prima facie seem sensible to have another institution regulate it. On the other hand, having supervision in the Central Bank might reduce the chance of regulatory capture (Haubrich, 1996). Furthermore, as we have noted, there is a clear element of reputation risk. Even though monetary policy and supervisory divisions may be very separate, problems affect the reputation of the whole institution. In particular, it may be more difficult for a Central Bank to be equally independent from current political pressure on monetary and on banking issues. Bolstering confidence in the banking system may involve a degree of co-operation with government that would look inappropriate in maintaining the credibility of monetary policy.

However, changing the system has costs – not just in the direct sense of the disruption of those being reorganised and the spillover to those they deal with – but at a more general political level. There has to be a reason for change and while that might be derivable in terms of a simple costs–benefit analysis, it is difficult to avoid the implication that something was 'wrong' with the previous system otherwise it would have been able to reform itself as a part of its normal operation. This may be a signal that a government does not want to give. Indeed it may have the alternative better plan in the drawer, ready to roll out if the need arises but only if there is need from the pressure of events or the revealed (loss of) confidence in the system. The ammunition once used will not be available subsequently.

The information needs are not simply one way from supervisors to the Central Bank. The Central Bank may be able to detect incipient problems, particularly in the last stages before a problem emerges from its monitoring of payment traffic and settlement accounts (Pauli, 2000). However, to some extent, the foregoing very much characterises the position in the more advanced market economies. In other environments it may be very difficult to operate a highly professional and incorruptible system. Central Banks tend to offer the greatest chance of independence from undue political and commercial influence (Goodhart, 2000) and hence in these circumstances concentrating the whole of the supervisory and regulatory system in them may be the best solution, despite its drawbacks. The chances of being able to recruit and fund a satisfactory array of qualified and experienced supervisors may be very limited.

Evidence on the subject is rather mixed. Copelovitch and Singer (2004) suggest that countries where bank lending is a more important route to company finance will tend to opt for locating banking supervision within the Central Bank while those that are more capital market based, are more open to trade and have relatively concentrated banking systems, will opt for separation of supervisory responsibility (a point confirmed by Masciandaro's work). However, with only 21 OECD countries to consider it is difficult to draw strong conclusions. Widening the net to 107 countries, Barth *et al.* (2001) find that only a quarter of countries have banking supervision clearly separated from the central bank compared with the largely equal split in the OECD.[12] Although the trend in the OECD has been towards separation from the central bank (Australia, Canada, Denmark, Japan, Korea, Sweden and the UK have made this move in the last 20 years). Not surprisingly therefore, in a study of the whole dataset, central bank supervision tends to be associated with the characteristics of those non-OECD countries – greater government ownership of banks, less foreign ownership, etc. The nature of the monetary policy regime is also relevant. In currency boards and fixed exchange rate regimes where there is no or little discretion on monetary policy the conflicts of interest are necessarily lower in a direct sense but weak supervision or forbearance could still destroy the monetary policy regime.

As it is becoming progressively more difficult to draw hard and fast lines between financial activities (what Masciandaro describes as 'financial blurring' in his comments[13]), it becomes more difficult to produce arguments for supporting separate regulators of the different institutional classifications. In practice the same activities undertaken by different institutions would be regulated differently. However, this may be no bad thing. Such regulatory competition may both encourage better regulation and help determine which sorts of institution are better placed to undertake the activity. There is no reason to suppose this will be a rush for the bottom, as showing you are regulated in a weaker manner is scarcely going to be a recommendation for those interested in the prudent management of the funds they have lent, whatever their appetite for risk. However, Eisenbeis suggests that such competition in the EU environment is likely to lead to a less regulated environment, limited by the extent of minimum standards laid down at the EU level. Quality of institution as revealed by the regulatory framework is used as a positive feature in prospectuses (see the example of Deutsche Bank explored in Mayes *et al.*, 2001). Competition may also encourage innovation both on the part of regulators and the regulated. Greenspan (1994) described it more starkly: 'a single regulator with a narrow view of safety and soundness and with no responsibility for the macroeconomic implications of its decisions would inevitably have a long-term bias against risk-taking and innovation. It receives no plaudits for contributing to economic growth through prudent risk-taking, but it is severely criticised for too many bank failures. The incentives are clear.'

However, the potential gains are not unidirectional. Eisenbeis suggests a number of adverse incentives that appear in the US because financial institutions try to find the most favourable regulatory climate for particular products. The income of regulatory organisations and hence the jobs of their employees depend upon the size of what they have to regulate, both in terms of the number of institutions and the complexity of the framework of rules. Number of institutions covered and complexity of the system would tend to be inversely related in an environment of regulatory competition.[14] It is possible that in trying to protect their client base, regulators themselves might be tempted to offer lower compliance costs, not so much from efficiency of regulation but simply a reduced level of monitoring. That implies that they themselves are not particularly accountable, which is becoming less and less the case. Furthermore, as Masciandaro points out, a single regulator puts all of the authorities' reputation in one basket. A mistake in one branch harms the reputation of the whole. Given that one would want to recover reputation it is more difficult to suggest what the next step is in the case of a unified regulator; presumably one would return to the beginning of the cycle.

The more separately defined the objectives of a regulator, the less the scope for internal conflict, but it is not clear that inter-organisational interaction is a more effective way of resolving conflicts than internal decision, as Eisenbeis discusses in Chapter 8. In the latter case at least, someone has the power to decide, whereas inter-institutional conflicts may go unrecognised and even when recognised, unresolved. There is something to be said for a comprehensive review along the lines of the Wallis Committee in Australia, to check what the different objectives are and whether the structure of the various parts of the system adds up to a coherent and comprehensive whole. It can provide an opportunity for streamlining and simplification both for the treatment of the financial sector when it is working normally and in the case of difficulty as we discuss at some length in the next section. However, although there are unique opportunities for review, the more normal circumstance is the need for a continuing ability to check that the trade-offs between the various objectives of regulation are being met in a way that maximises society's welfare. Eisenbeis argues that the legislature has to decide how it can delegate that process to the relevant agencies as it can only handle obvious discrepancies. The continuing micro-management of the trade-offs and assessment of the relevant costs and benefits is necessarily administrative or it would be unmanageable and have a rather short-run horizon, given the frequency of the electoral cycle. Any such 'contracts' are inevitably incomplete as neither the legislature nor the agency can foresee all the possible outcomes. Thus the general principles set out will need to be revised from time to time.

Kahn and Santos in Chapter 7 consider a somewhat narrower division into the lender of last resort, deposit insurance and supervisory functions. Even here there are some potential conflicts of interest in addition to the normal moral hazard problem from providing insurance in any form (supplemented by adverse selection if it is voluntary). Having deposit insurance as part of the Central Bank responsibilities is relatively unusual (Ireland, the Netherlands, Spain; shared in Greece and Portugal) and normally it is run by a separate public body, the industry itself or some combination of the two. Under separation of responsibility, the biggest conflict tends to occur between the body responsible for taking decisions on the bank's actions (especially closure), and those who have to bear the costs. Thus the supervisor may be exposed to reputational costs in the event of a problem, the deposit insurance agency may have to pay out and the lender of last resort may be secure through its collateral (see Wood, 2004; Wood and Capie, forthcoming). Nevertheless last resort lending could increase the costs to the deposit insurance agency by allowing losses to mount, as could delays by supervisors hoping to avoid a publicly acknowledged problem.[15] As discussed in the next section there are various ways in which the different authorities can advance themselves on the ladder of priority in the event of failure.

The key issue, also identified in Repullo (2000), is that in addressing the costs to the banking system of different solutions to a problem there, all factors should be taken into account, whereas in collateralised lending to an illiquid bank it is the narrow costs that have to be considered. Because a central bank can take a longer-term view than much of the market it may well price assets differently. In the Kahn and Santos framework this ends up with a clear separation of responsibility, with smaller liquidity issues being the preserve of the Central Bank under the lender of last resort function and bank system consequences being the decision of the deposit insurer. However, this is a very US-centric conclusion as most deposit insurance agencies in the EU do not have the structures that would enable such responsibility to be exercised, as Maria Nieto points out in her comments on the chapter.

In many respects deposit insurance is the weak link in the system of banking regulation in various countries and this is the topic that Eisenbeis focuses on in Chapter 8.[16] The insurer will want a say in the activities of the supervisor, especially in the event of emerging difficulties. If the two are not organised in a coherent package then each will have an incentive to try to shift the burden onto the other to the detriment of the other stakeholders. This can result in increased risk or belt and braces over-regulation, depending upon how the system is structured. Not only does deposit insurance have an element of moral hazard and reduce the extent to which depositors will exercise market discipline and monitor the performance of banks, but it offers rather different guarantees from what many of those insured may expect. As Nieto points out Member States in the EU are not under an obligation to support their deposit insurance funds. If they were to be insufficiently funded in a crisis then depositors might not get paid out to the extent they expect. However, this results in just the same ambiguity as in countries with no deposit insurance. Depositors believe there is some implicit contract with the government that they will be bailed out at least in part, if there were to be a serious crisis. In a major crisis the losses would be electorally significant, and hence action would be taken – either to prop up existing funds, or create new funds or indeed avoid the call on the funds in the first place by supporting the banking system.

Eisenbeis goes to some length to show that the US experience has some very negative lessons for the EU from the behaviour of state level deposit insurers or from sectoral insurers as in the case of the Savings and Loan collapse. The Ohio state fund collapsed in 1985 and Rhode Island in 1991 so these are not examples from distant history. Moreover, it was not simply a question of financial resources – the GDP of Ohio is greater than that of all but the seven largest of the 25 EU members and the total loss was less than 0.1 per cent of GDP. It was more a question of willingness.[17] However, the distinction between US states and the Member States of the EU is important in this regard as their ability to tax and to borrow is considerably greater, both in practice and constitutionally. Whether that should make the taxpayer feel more comfortable with the deposit insurance schemes is a different matter. As is clear from Table 1.2 there is considerable variety

Table 1.2 Deposit protection in the EU (25)

Systems in EU	*Supervisor*	*Deposit insurer*	*Funded*	*Fund target*	*Risk-based*	*Coverage*	*Co-insure*	*Off-set*	*Timing (months)*
Austria	Separate	Private company	Ex post	No	No	€20,000	Yes	Yes	3+
Belgium	Separate	Supervisor	Fund	Yes	No	€20,000	No	Yes	3+
Cyprus	CB	Separate	Mixed	Yes	No	€20,000	Yes	Yes	3+
Czech Republic	CB	Separate	Fund	No	No	Higher	Yes	Yes	3+
Denmark	Separate	Separate at CB	Mixed	Yes	No	Higher	No	Yes	3+
Estonia	Separate	Separate	Fund	Yes	No	Lower*	Yes	Yes	<3
Finland	Separate	Supervisor	Mixed	Yes	Yes	Higher	No	Yes	3
France	Separate	Private company	Fund	No	Yes	Higher	No	No	3+
Germany	Separate	Supervisor	Fund	Yes	No	€20,000	Yes	Yes	3+
Germany	Separate	Private company	Ex post	No	Yes	Higher	No	Yes	>21 days
Greece	CB	Separate	Fund	Yes	No	€20,000	No	Yes	3+
Hungary	Separate	Separate	Fund	Yes	Yes	Higher	Yes	Yes	<3
Ireland	CB	CB	Fund	No	No	€20,000	Yes	Yes	3+
Italy	CB	Private company	Ex post	Yes	Yes	Very high	No	Yes	3+
Latvia	CB	MoF/CB	Fund	No	–	Lower*	Yes	No	3+
Lithuania	CB	MoF/Government	Fund	Yes	No	Lower*	Yes	Yes	3+
Luxembourg	Separate	Separate	Ex post	No	No	€20,000	Yes	No	3+
Malta	Separate	Separate	Mixed	Yes	No	€20,000	Yes	Yes	3+
The Netherlands	CB	CB	Ex post	No	No	€20,000	No	Yes	3+
Poland	CB	Separate at MoF	Fund	No	No	Higher	Yes	Yes	<3
Portugal	CB	CB	Fund	No	Yes	Higher	No	No	3+
Slovakia	CB	Separate	Fund	Yes	No	Lower*	Yes	Yes	3+
Slovenia	CB	CB	Banks make deposit to CB	Yes	No	Higher	No	Yes	<3
Spain	CB	Separate at CB	Fund	Yes	No	€20,000	No	No	3+
Sweden	Separate	Separate	Fund	Yes	Yes	Higher	No	Yes	3+
The UK	Separate	Separate	Fund	Yes	No	Higher	Yes	Yes	3+
Total = 26 includes German public and private systems	Separate = 14, CB = 12	Separate = 13, Private = 4, CB = 4, MoF = 2, Supervisor = 3	Fund = 16, Ex post = 5, Mixed = 4, Other = 1	Y = 16, N = 10	RB = 7, N = 18	Base = 10, H = 12, L = 4	Y = 14, N = 12	Y = 21, N = 5	20 days > 3 months

Source: Garcia and Nieto (2005).

Notes

CB, Central Bank; MoF, Ministry of Finance.

* Transitionally on way up to EU minimum.

among the EU deposit insurance schemes, which is particularly a problem from the point of view of cross-border schemes as noted in the next section.[18] Perhaps the most useful precedent comes from Calomiris (1992) who finds that in the US it was the privately funded deposit insurance schemes that effectively imposed unlimited liability on their members that tended not to fail. There the incentives to encourage prudence in others beforehand, act quickly to limit losses and if necessary apply the least costly approach if resolution of a bank was nevertheless required.

Despite the Deposit Insurance Directive, what people are likely to get according to the rules in the different countries varies considerably. There may be much more convergence in practice, outside asset rich countries like Norway, once the new members have completed their transition period, as those with more generous provision may find they have more of a solvency problem. Indeed, normal regulatory competition, if banks or their customers have a real opportunity for regime shopping as the market integrates, will lead to a greater equalisation of the insurance fund provisions, presumably clustering near the minimum required by the Directive. The biggest difficulties are likely to occur in the unfunded insurance arrangements, as the call on the other banks may come just when they are also pressed, as they would be if it is a macro-economic rather than an idiosyncratic event that causes the problem. As Eisenbeis points out there are many respects in which the incentives of the insurers, the taxpayers and the contributing banks are not aligned. A comprehensive review of the arrangements seems called for, especially if, as in the US, the Deposit Insurance agency is to be given a greater role in deciding when action is to be taken in the face of impending losses as suggested in the next section in order to obtain such an improved alignment.

There has been very little empirical work done on these issues but, in his comments on Kahn and Santos, Masciandaro explains the results of some work he has done on the structure of financial regulation in a sample of countries covering the OECD and non-OECD Europe (Masciandaro, 2005). In line with the foregoing discussion, he emphasises that while it is possible to devise some criteria for deciding what arrangements would be economically efficient, the political economy of the choice seems to be dominant.[19] The expected control variables, the relative importance of equity markets, the smallness of the financial system and having a Nordic/Germanic legal system all increase the probability of having a single financial authority. In this and Barth *et al.*'s (2001) analysis, it is much easier to show what is the case than to explain it. Barth *et al.* (2001) find no significant features that differentiate countries with single regulators from those with several. However, they do find clear differences between those where the Central Bank is the regulator and the rest: government ownership of banks is higher, as is the rate of rejection of applications for bank licences and the level of foreign ownership of banks is lower, the restriction on range and scope of permitted activities for banks is lower as is market discipline, but the incidence of deposit insurance is higher as is a measure of moral hazard. One is not clearly the cause of the other. On the whole they are both a function of the level of development of the economy. So we end up where we started, with only a very limited range of factors, other than history, that help explain why one set of institutional arrangements has been preferred over another.

The same sort of conclusions apply to choice over whether to have deposit insurance (Demirgüç-Kunt *et al.*, 2005), and over the generosity of the systems chosen. Ironically, simple emulation is a major stimulus. Rather like the spread of financial stability reviews, if comparable countries have adopted deposit insurance that prompts others to do so, and not necessarily with features that fit their particular circumstances. A decade ago deposit insurance was primarily a feature of high income countries with well-developed financial markets. As with research on supervision, there is some indication that deposit insurance is more a characteristic of accountable democracies but this may also be simply, a rather better means of specifying income and trend components of the relationship. Because of the element of emulation many of these newer schemes seem to be somewhat over-generous by comparison, with a stronger element of moral hazard as a consequence.

Banking regulation as a whole is in the process of being geared up with the introduction of Basel 2 and the associated Capital Adequacy directive in the EU. While this may not in itself alter the structure of regulation, it alters the relationship between the regulator and the regulated and the relationship between regulators. In this second regard it encourages consolidated supervision and the application of single approaches to risk management and the holding of capital across the group, as is discussed in more detail in the next section. But in the first, pillar 2 requires a closer relationship between the supervisor and the supervised as the supervisory review has to decide not just whether risk management systems are adequate but whether the bank should hold extra capital against risk, over and above that required under pillar 1. This close relationship, as pointed out by Benink in his comments, will inevitably make it more difficult for regulators to impose discipline. Because the bank itself will be the source of information an element of regulatory capture is possible and the degree of implicit responsibility on the part of the regulator, should anything go wrong in the bank, will be increased. It is interesting, as Benink notes, that the Basel Committee has recommended floors for the extent of the reduction in the capital charge that can be made under the advanced approaches, thereby limiting the amount by which the largest banks might hope to see their capital requirement fall. This could imply a certain caution with respect to the pressures involved.

Ideally, pillar 3 would have provided an offsetting balance through the market, so that not only could market pressure be exercised, as a result of the increased information, and not just supervisory pressure, but supervisors could commit to intervene if market information indicates possible problems. Under pillar 2, and the traditional arrangement, much of the relevant information will remain confidential to the supervisor, perpetuating the dilemma about whether to reveal a problem and run the risk of being held responsible and, indeed, of being accused of causing a crisis unnecessarily, or forbearing and thereby increasing the size of any resultant problem. Benink suggests that much of the information to be disclosed will not in itself be particularly valuable and that the key information will continue only to be obtained by the more sophisticated of external watchers.

The organisation of financial supervision in a cross-border world

The increasingly cross-border nature of financial institutions and the development of regulation of banks with Basel 2 are forcing supervisors to work more closely with each other. This has been emphasised in the EU with the rapid implementation of the Financial Services Action Plan (FSAP) (unfortunately having the same abbreviation as the IMF Financial Sector Assessment Programme) under the Lamfalussy process, aided by the two committees of supervisors CEBS and CESR (Committee of European Banking Supervisors and Committee of European Securities Regulators). However, the way they work together and the relative benefits and costs of these different relationships have only been touched on fairly lightly in public discussion. It is therefore one of the foci of this book.

There are some clear factors that are helping determine the structure of this interaction but the picture is far from complete. The main drivers are largely from practical necessity and progress is being made where it can, rather than necessarily, where it is most needed from the point of view of all the stakeholders. The most forms of interaction that are most suitable depend upon whose benefit is being considered:

- supervisors, in conducting a full and efficient job;
- the supervised, in being able to run their businesses in an efficient manner and minimise compliance costs subject to meeting the prudential (risk management) requirements – we can no doubt differentiate between the return to shareholders and the more immediate gains to management from less complexity;
- customers, in being able to have a full range of services, informed choice and maximised benefits from the structure of costs and returns;
- society at large, from having a dynamic but stable financial system in which they can have confidence;
- taxpayers, in their role as underlying insurers of the system;
- Central Banks/supervisory agencies in addressing financial stability and emergency liquidity assistance/lender of last resort.

The full list is longer insofar as counterparties, creditors, employees etc. are not properly included under one of the other headings.

There is no reason why these various stakeholders should receive an equal weight but if the design of the system is to be primarily driven by the immediate practical concerns of the supervisors and those whom they supervise this is not a guarantee that all of the interests will be met in a balanced manner. In a single jurisdiction it is possible to decide upon an appropriate balance but once we cross borders the different parties can only negotiate and their powers of negotiation vary according to the aspect involved. In Chapter 9, Dirk Schoenmaker and Sander Oosterloo consider five dimensions of this problem: effectiveness of supervision, efficiency of supervision, financial stability, competitiveness of financial firms and proximity to financial firms, but this is only part of the problem.

The principal distinction of concern is between the issue of appropriate supervision of cross-border institutions and activities in a framework of normal working and general compliance and one where something starts to go wrong. Once there is a question of actual or potential reallocation of significant losses either across people or across time then the game changes as do the players and their jurisdictional responsibilities. This has long been recognised and was addressed specifically in the European environment by the two Brouwer Reports (EFC, 2000, 2001; Brouwer *et al.*, 2003), the first on the handling of supervision across borders and the second on the handling of crises. However, the two *are* related. Since there is not a one-to-one match, those who are going to have to handle a problem need to be convinced that those who were responsible for prior supervision protected their interests adequately.[20]

There are two obvious routes out of this. One is to try to establish the appropriate means of working together. The other is to try to internationalise the structure so that there is a much closer mapping between the supervisory and problem handling agencies. The latter is already largely the case in the United States, where, despite a strong international role in the banking system, it still retains supervisory control over its systemically important banks and over the outcome of systemic events that impinge on its citizens. As we come down the ladder of economic and financial size, similar conclusions can probably be drawn for Japan, Germany and the UK, but they do not apply even to all of the G10. Belgium, the Netherlands, Sweden and Switzerland, at least, face systemic threats from the activities of cross-border institutions, where either the controllable cause or solution are outside their jurisdiction.

For small countries the problem can be acute, where almost all their banking system is foreign owned. Outside the EU/EEA small countries have somewhat more scope to organise supervision and problem solution on a basis that helps them match powers and responsibility rather better. But inside the EU/EEA, the home country principle, where the supervision of branches and direct cross-border activity are the responsibility of the home country supervisor, makes the mismatch more difficult to solve. This is emphasised by the current lack of appetite for creating new supranational institutions. (In their chapter, Schoenmaker and Oosterloo try to advance the agenda just a little by advocating a European System of Financial Supervisors, which, while driven by the national supervisors, would have some sort of centralised body with a European mandate in some sort of parallel to the European System of Central Banks (ESCB).)

Under Basel 2, the multiple supervisors of a cross-border institution are supposed to act together under a lead supervisor, who will normally be the home country supervisor, where the home country is expected to be the country of the bank's principal operation and incorporation. In the new Capital Adequacy Directive for implementing Basel 2 in the EU, the home country principle of appointing the lead (referred to as the 'consolidating' supervisor in this case) supervisor is even stronger and decisions on the approach to be applied to the bank and the options to be permitted can be made by the lead should the host country supervisors fail to agree.

The FSAP and the working of CEBS is helping regulatory structures in Europe converge but at present the forging of detailed agreements is on a case by case basis relating to individual institutions. Maria Nieto, in her comments, describes this as 'improvised co-operation' (Freixas, 2003). Such improvisation is needed because the strict interpretation of the principle of home country control would not meet the needs of the parties. Greater involvement of host countries facing systemic concerns for the bank in question is required. How such arrangements should be labelled is a sensitive issue. Vesala (2005) has described them as 'collegial' but it is the practice which really matters.[21] Host countries need to be sufficiently involved that they can anticipate problems just as well as if they were the sole supervisor themselves. They also need to be able to convince their governments (on behalf of taxpayers and financial system participants) that the supervisory task is being performed to the same standards they would impose on themselves. Otherwise the whole system would be open to recrimination as soon as anything starts to go wrong.

This process is perhaps most advanced in the Nordic–Baltic region, where the largest bank, Nordea, which is already the most cross-border of all the European banks (see Table 9.3), has announced that it expects to take advantage of the European Company Statute and turn itself into a single entity, based in Sweden but operating branches in Denmark, Estonia, Finland, Norway, Poland and Sweden. (Nordea is also an insurance company group as well as a banking group and has financial activities elsewhere, including New York.) As at March 2004 Nordea had a 40 per cent share of the Finnish banking market, 25 per cent of the Danish, 20 per cent of the Swedish and 15 per cent of the Norwegian. Its share of the insurance markets was somewhat smaller: Finland 35 per cent, Denmark 20 per cent, Norway 9 per cent and Sweden 6 per cent (all data from Rahoitustarkastus).

Such collaboration among supervisors seems elementarily sensible both in easing their co-ordination and in lowering the compliance burden on banks. The more that a single system can be applied to a bank the easier it will be for it to rationalise its operations and cut costs to the benefit of its customers. Many bank operations in managing risk only make sense if the same principles can be applied right across the group, as in many respects capital is held to support activities right across the group. The more the needs for economic and regulatory capital are aligned, subject to their different purposes, then the more efficient the organisation can be. However, this common sense is the driving force only where the home country is dominant compared to the various host countries. In the EU, where a bank operates through branches in other countries the host country does not have powers of prudential supervision (all the conduct of business rules are still applied by the authorities in the country of operation). A strong measure of 'collaboration' is thus enforced.

While in theory the home supervisor could dictate to the host supervisors or indeed simply dispense with their services and recruit staff locally, this is unlikely to be the case. A solution more like that which applies in the US is likely to be arrived at; supervisory activities will be joint under the leadership of the home (consolidating) supervisor. The solution host supervisors are hoping for is some sort of 'college' of supervisors for each major bank where the information is shared among the college and not merely dispensed when the home supervisor deems it appropriate under some extension of the current Memoranda of Understanding.

The reason that such a closer arrangement is necessary is that the host country authorities, whether supervisors or central banks, could not perform their financial stability function properly otherwise. If the host country is to ensure systemic stability it not only has to be informed about the state of the financial group but it has to be clear that its interests are being taken into account in deciding about the actions to be taken. Such actions fall into three groups (Mayes, 2005):

- voluntary actions undertaking by the bank itself or the market in the event of under-performance but regulatory compliance;
- compulsory and voluntary actions taken when regulatory limits are breached but the bank appears solvent;
- actions taken when the point of insolvency or licence withdrawal has been reached.

Each of these areas takes us beyond a narrow definition of supervision yet host supervisors have a view on how they should be handled which needs to be taken into account. There are enormous advantages in the market sorting out problems without recourse to supervisor intervention, or worse still having to address the issue of whether public funds should be used. Hence host supervisors, who fear they will be at a disadvantage in the event of difficulty, will be particularly keen to see effective market discipline, with clear market signals and a strongly functioning market for corporate control that converts these signals into action. Unfortunately, the banks and financial groupings for whom the problem is most acute are among those more immune from external pressure as their takeover or merger would usually involve difficult questions of excess market concentration. The route of effective pressure will therefore have to come more from shareholders within the existing grouping.

The effectiveness of this pressure also depends on whether people believe that, should the bank get into difficulty the authorities will pressure it effectively and ultimately resolve it in a way that would mean that the management loses their jobs and the shareholders get wiped out if the bank appears insolvent. Supervisors all have in place requirements for prompt corrective action (PCA) should regulatory limits be challenged or broken. However, what these imply in practice and what the host supervisors can predict the lead supervisor might wish to do is far from certain. Problems with large institutions are fortunately rare so there is not a clear history of response which would act as guidance. Indeed insofar as there is a history it would tend to lead people to believe that a degree of forbearance is more likely. That is not what the host country supervisors, threatened with systemic problems, want to hear. A home supervisor might very well feel that there is an opportunity for some enforced burden sharing should the forbearance turn out not to work and the difficulties increase.

The largest concern, however, is not the incentives to relatively weak PCA but the realisation that the authorities do not have in place some system for resolution that will involve much other than a somewhat incoherent bailout with the help of taxpayers' money (Mayes, 2005; Mayes and Liuksila, 2003). In other words it is the lack of a believable ex ante agreement on how any such crisis might be addressed that is the issue rather than sorting out how supervision of the institution in normal times might go.[22]

However, the problem is not a straight-forward application of the 'too big to fail' epithet. (In any case what is meant here by too big to fail is 'too important to the financial system for the business to close', or perhaps, in Alan Greenspan's phrase, 'too big to close quickly', not literally that the existing bank must be kept in being. Thus business continuity is required for at least the main operations of the bank even if there is to be a change of ownership and management, say through the formation of a bridge bank (Mayes, 2005). Hüpkes (2004) has an interesting discussion of whether some 'inessential' lines of business can be closed or a least held in suspension while the main operations are maintained and ownership changed.) In a very real sense cross-border banks can be 'too big to save' (Mayes, 2005; Sigurdsson, 2003; Hüpkes, 2003) where they are headquartered in countries that are small compared to size of the possible exposure. Switzerland has explicitly recognised in the case of UBS and Credit

Suisse and has actually capped the payout from its deposit insurance fund. This puts the incentive rather differently, because, then the lead supervisor needs the predictable co-operation of the host authorities if it is to be able to put together a sensible outcome. Thus, if the outcome is going to have systemic consequences in both the home and the host countries unless it is properly managed, rather than just in some host countries, the chance of getting a prior agreement is enhanced. A country cannot provide support just for its part of the troubled institution; its support will go, the institution as a whole, and its creditors and depositors.

Outside the EU, the common response is to find some means of carving up these systemically important banks among the various authorities in the event of failure. This is a form of applying the territoriality principle (Baxter *et al.*, 2004). While inelegant and probably suboptimal for some of the creditors it does enable the institution to be kept going. New Zealand has probably articulated this most clearly, by insisting that foreign-owned systemic banks not merely adopt a corporate form in New Zealand that permits a ready takeover by the New Zealand authorities but that they actually keep all systemically relevant functions inside the New Zealand subsidiary (Bollard, 2005). A really rationalised cross-border bank would concentrate its functions, treasury operations for example, so that the subsidiary does not constitute something that could function on its own. This has already been happening with Nordea and although it is at present operating through subsidiaries rather than branches in most of the Nordic countries (Mayes, 2005), it is not clear how readily the constituent banks could operate on their own, even now, because of the centralisation of functions that has taken place (a point also made by Eisenbeis in his chapter). (It is a separate issue whether territoriality will normally allow the carving out of a sufficiently 'fair' or viable portion of the net worth to avoid the resolution being a systemically harmful event. It can work in the US as the chances are that a disproportionate amount of the net assets will be there and that foreign banks will in any case not be systemic.)

It is worth pursuing the New Zealand example a little further because the proposals there have taken a new turn, one which illustrates very clearly the need to balance the interests of the various stakeholders. The systemic banks in New Zealand are now all Australian owned. These banks have lobbied the Australian government to try to get a single regulatory environment, based on the Australian system. While one could debate whether their motivation was purely to keep the most efficient form and avoid the inefficiencies of facing multiple regulators, and did not involve some element of opting for what appears the more debtor-friendly regime, there is clearly great sense in having a single regulator for a financial system that is in many respects rather more integrated than those in Europe despite the use of separate currencies. While the New Zealand supervisor, the Reserve Bank, has resisted the move it appears